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4) Title: MONITOR PROTEIN FOR MEASURING PHOSPHORYLATION OF PROTEIN

4) 発明の名称 蛋白質のリン酸化を測定するためのモニター蛋白質

7) Abstract

A phosphorylation monitor protein by which the phosphorylation in a phosphorylation region can be conveniently monitored has been successfully constructed by using a protein containing the phosphorylation region and a characteristic-variable region wherein characteristics vary due to a change in the three-dimensional structure. As a result, there has been developed a system for analyzing protein phosphorylation which is free from any radioisotope and applicable also to the measurement *in vivo*. This analytical system is usable not only in detecting a phosphorylation reaction but also in screening a kinase or a compound promoting or inhibiting phosphorylation.

ABSTRACT

5 A phosphorylation monitoring protein which can easily monitor the phosphorylation of a phosphorylation region by using a protein comprising the phosphorylation region and a variable property region whose properties change according to the conformational change of the phosphorylation region, has been successfully produced. In the present invention, an analysis system in which no radioactive isotopes are used and that is applicable to *in vivo* measurement has been developed for protein phosphorylation. The analysis system of the present invention can be used not only for the detection of phosphorylation reaction, but also for screening a kinase and screening a compound which stimulates or inhibits phosphorylation.